Joint DOGGR & Water Boards Proposal for Underground Injection into Aquifers that are Not Clearly Exempt (subject to further refinement in subsequent formal correspondence to EPA)

The following actions will be implemented through enforceable orders (or rulemaking) with firm deadlines.

1. <u>Disposal into non-hydrocarbon producing zones of aquifers that are clearly not exempt:</u>

Review of DOGGR records and list of all remaining injection wells that are discharging into non-exempt, non-hydrocarbon zones of aquifers will be completed and submitted to the State Water Board by January 5, 2015. Depending on the number of wells that are submitted, State Water Board expects to be able to identify any injection wells that are potentially impacting water supply wells by February 6, 2015.

- a. No new disposal wells will be permitted unless and until EPA approves an aquifer exemption.
- b. Existing disposal wells:
 - i. If potentially impacting water supply wells,² DOGGR will issue emergency order to operator to cease injection immediately, and concurrently, or as soon as practicable thereafter, expressly rescind permit approval. Water Board will issue an information order.
 - ii. If not potentially impacting water supply wells, and the aquifer is 3,000 mg/L total dissolved solids (TDS) or less, no later than April 1, 2015 DOGGR will order operator to cease injection within 6 months of the date of the order, and concurrently, or as soon as practicable thereafter, expressly rescind permit approval unless and until EPA approves an aquifer exemption. Water Board will issue an information order.
 - iii. If not potentially impacting water supply wells, and the aquifer is more than 3,000 mg/L TDS and less than 10,000 mg/L TDS, DOGGR will order operator to cease injection no later than February 15, 2017, and concurrently, or as soon as practicable thereafter, expressly rescind permit approval unless and until EPA approves an aquifer exemption. Water Board will issue an information order. If there are supply wells in any portion of the aquifer, or if any portion of the aquifer is at a depth that may be reasonably expected to supply a public water system, DOGGR and the Water Boards may issue the orders on a higher priority basis.
- 2. <u>Injection into hydrocarbon producing zones of aquifers that are clearly not exempt:</u>

¹ Hydrocarbon producing zone is the portion of an aquifer that "cannot now and will not serve as a source of drinking water" because: "It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible." (40 CFR § 146.4 (b)(1).)

² Injection wells potentially impacting water supply wells include injection wells into aquifers with 3,000 mg/L total dissolved solids (TDS) or less that meet either of the following criteria: (1) the uppermost depth of the injection zone is less than 1500 feet below ground surface (regardless of whether any existing supply wells are in the vicinity of the injection well), or (2) the injection depth is within 500 feet vertically and 1 mile horizontally of the screened portion of any existing water supply well.

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- a. If groundwater in the vicinity of the hydrocarbon producing zone does not currently have any beneficial use³
 - i. New wells that are part of an approved project may be permitted with the express condition that permit expires on February 15, 2017, unless EPA approves an aquifer exemption before then.
 - ii. For existing wells, DOGGR will issue orders to operators to cease injection by February 15, 2017, unless EPA approves an aquifer exemption before then.
- b. If groundwater in the vicinity of the hydrocarbon producing zone has any current beneficial use
 - i. No new permits will be issued.
 - ii. For existing wells, DOGGR will issue orders to operators to cease injection by February 15, 2017 (or sooner, depending on the use of the groundwater), unless EPA approves an aquifer exemption before then.
- 3. <u>Injection into eleven aquifers with unclear exemption status, but that have been historically treated as exempt:</u>

The Water Boards and DOGGR will work with EPA to evaluate these eleven aquifers based on current data. If any portion of these aquifers meets the criteria for exemption and the Water Boards determine that injection into the aquifer will not adversely affect existing or potential beneficial uses of groundwater, DOGGR will prepare and submit an exemption request to EPA. The evaluation and subsequent decision for these eleven aquifers will be completed within 24 months. In the interim, injection wells into these aquifers will meet the following requirements:

- a. No new disposal wells will be permitted unless and until EPA approves an aquifer exemption.
- b. Existing disposal wells:
 - i. If potentially impacting water supply wells, DOGGR will issue emergency order to operator to cease injection immediately, and concurrently, or as soon as practicable thereafter, expressly rescind permit approval. Water Board will issue an information order.
 - ii. If not potentially impacting water supply wells, DOGGR will order operator to cease injection no later than February 15, 2017, and concurrently, or as soon as practicable thereafter, expressly rescind permit approval unless and until EPA approves an aquifer exemption. Water Board will issue an information order. If there are supply wells in any portion of the aquifer, or if any portion of the aquifer is at a depth that may be reasonably expected to supply a public water system, DOGGR and the Water Boards may issue the orders on a higher priority basis.
- 4. DOGGR will submit any exemption requests for the above three categories of aquifers over time, and with sufficient opportunity for EPA to review the requests and approve or disapprove all of them by February 15, 2017.

December 19, 2014 (reflecting changes from 12/17 version with EPA suggestions added)

³ Note that this does NOT include any use of produced water.

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DOGGR will provide the data and an analysis of the data to the Water Boards for consultation prior to submitting them to EPA. DOGGR will submit the exemption request to EPA if the portion of the aquifer meets the criteria for exemption and the Water Boards determine that injection into the aquifer will not adversely affect existing or potential beneficial uses of groundwater.